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DIETO-THERAPY OF ACUTE FEVERS.

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The endeavor to bring about the healing of the sick person by means of appropriate change of nourishment is called dieto-therapy.

Scientists have gradually worked out a science of nutrition during the past fifty years but it is only within the past ten years that the art of applying appropriate nourishment for the cure of the sick has taken form.

It can safely be said that the Science of Nutrition began with V. Liebig and the Art of Dieto-therapy with V. Leyden.

V. Liebig, the father of the modern methods of organic analysis, gave to the world a large amount of the knowledge it posesses today concerning the chemistry of the carbon compounds, the constitution of foods, of urine, of feces and of tissues. He applied to the problems of biology the mental wealth of the newer chemistry which he himself was creating. In 1842 he suggested that the nitrogen of the urine might be made a measure of the protein destruction in the body. Thus began the science of nutrition. That torch of knowledge which he so marvelously developed was next intrusted to the hands of Carl von Voit, who after years of the most painstaking investigations and profound studies, laid the chief generalizations of this new science.

The endeavor to cure the sick by proper changes of diet has always existed and its history is interwoven with the history of mankind. The sacred writings of the Egyptians and of the Hebrews give evidence of this fact. It is just as deeply rooted in the consciousness of man that food contains healing powers as that it

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may be the cause of weakness and disease. But it was not until 1897 that the foundation of our modern art of endeavoring to cure the sick with appropriate diet was established upon a scientific basis. E. von Leyden with the collaboration of the foremost men of medical science of Europe gave to the world the epoch-making "Handbuch der Ernahrungs-Therapie."

The history of the science of dieto-therapy as related to the acute fevers, or that part of the science of medicine which deals with the application of diet to the cure of acute diseases accompanied by fever, reads like a romance. The medicine of Hippocrates contained much that claims our admiration. But in the subject of diet his directions are irrational, indeed harmful. It was his practice to give his fever patients ptisane, a decoction of barley water and honey. As a beverage it might suffice, but as nourishment it falls far short of the real requirement.

The teachings of the ancient Grecians continued to be the accepted practice in the middle ages. Boerhave and Van Swieten nourished the fever patient with mucilaginous soups and lemonade. The end of the 18th and the beginning of the 19th centuries marks the climax of starvation treatment in fevers. Brown, Broussais and Bouillard were then the great masters in medicine. It may perhaps be questioned whether all practitioners of that time rigidly adhered to the recommendations as given in the literature of those days by these great leaders. Otherwise one would be obliged to believe that not only many fever patients suffered untold agonies for want of food, but that many were sacrificed by reason, not of the fever but of inanition.

To the Irish clinician Graves, belongs the honor of first intro ducing and recommending a generous diet for the nourishment of the acute fever patient. This he did in his clinical lectures in 1843 in which he boldly declared that the chief source of danger in the febrile patient lay in the inanition, which is to be combatted alone by generous feeding. His declarations were in the nature of genuine reformation. That he had the right conception of the meaning of his endeavors is evidenced by the fact that he said, "If you should be in doubt as to an epitaph to be placed upon my grave, take this, "He fed fevers." His teachings were generally accepted in his own country. Not so in other countries, especially in Germany. About the same time in France, Chossat and a little later Trousseau, called attention to the influence of diet in the cure of acute fevers. In Germany, the geniune Hippocratic dietetic principle reigned supreme until about 1878 (30 years ago).

In 1878 Von Buss, assistant at Immermann's Clinic in Basel,

advocated that easily absorbabable nourishment must be given. His practical results were remarkable. But it was not until 1882 (25 years ago) that Hosslin placed the true cornerstone of a solid scientific foundation under the science of dieto-therapy as applied to fevers. He demonstrated, by most thorough and carefully conducted scientific experiments that equally as large quantities of mild food are digested and absorbed in the sick as in the well. He showed that the amounts of nitrogen and fats found in the feces of the sick are only immaterially larger than in the feces of the well, to whom equal amounts of food were given. He also demonstrated that the temperature of the patient is not raised by the giving of nourishment. To Hosslin all credit must be given for the modern accepted principles and practice of feeding in fevers. Since his scientific demonstrations it has become the accepted doctrine the fever patient must not be exposed to the dangers of inanition.

How does a fever patient differ from a well person? What is to be understood with the term fever? These are questions that we will not stop to answer or explain. The subject has been a matter of investigation for nearly 2,000 years and yet, there is no uniformity of opinion as to which forms of temperature elevations to include and which to exclude. But, for the sake of discussing this topic,, the following definition is ventured. Fever is that totality of symptons produced by bacterial toxines in the body. Elevation of temperature, due to bacterial toxines upon the heat regulating mechanism, is the most prominent sympton, which simple observation reveals. But, we must not identify as one and the same thing the elevated temperatures and the fever. The significance and the seriousness of a sickness depends only in part on the height of the temperature and dieto-therapy must reckon with other symptons more than with this. In the first place, because it so often determines the prognosis, is the condition of the heart and vascular system. The heart and blood vessels are involved in the pathological processes directly, and at once, on account of the circulating toxines accelerating the pulse, softening of the arterial walls, weakening of the heart muscles, toxically irritating the renal vessels, productive of mild and passing albuminuria of a congestion, to severe and permanent nephritis. These must be reckoned with, as of the greatest moment, in making up the therapy indications—dietetic or otherwise. So also are the additional vital fever disturbances which are to be observed in the central nervous system, ranging from mild sensorial depression, through delirium to coma. These are the reactions of the cerebrum to the fever toxines. The digestive apparatus also must be considered. Here

the fever toxines affecting the glandular parenchyma, lessens the secretion of the digestive juices, hence: scanty saliva, (dry mouth) and diminished gastric juice (weakened digestion) loss of appetite even to revulsion toward all food. And finally the altered condition of the metabolism of the body must be duly considered as a part of the fever ensemble and have its due weight of thought in the nutrition, namely, the increased destruction of the body proteins, and, but in a lesser degree, the increased destruction of the non-nitrogenous substances.

Classification of diseases having Fever. — The complexity of the recited symptoms, whose totality are necessary to describe the term "Fever", makes it plain why it is so difficult to arrange the diseases attended with fever, into groups or orders to which general dietetic rules may be suited. Ordinarily all diseases attended with fever are divided into mild and severe. For our purpose we would gladly accept this division. We would then demand that the severer the disease the more emphatic and firm the rules for diet be applied. It must be reiterated here that the height of temperature elevation as a factor of the fever is not alone to be considered in determining the severity of the fever. The body temperature is to be coordinated with the functions of the lungs, of the heart, and the kidneys; the general state of the body, the state or stage of the illness, the condition of the lips, teeth and tongue. Whether there is mild or severe fever, whether therefore the dietetic rules are to be applied rigorously or not, depends in every case upon the closest observation of all fever symptoms and their relative importance toward one another.

It will not to do sum up certain diseases as mild and others as severe. Measles, mumps and angina are generally simple and mild, and as such, need no careful dietary regulations; and yet there may occur a case of measles or angina with such violent symptoms, that nothing is to be neglected in the most painstaking application of every dietary thereapeutic regulation. On the other hand there are a number of disease whose anatomic diagnosis never reveal the intensity of the fever symptoms and never indicate the strenuousness with which the dietetic regulations are to be carried out. To this class belong erysipelas, pneumonia, scarlet fever, etc. Pneumonia may present, for instance, in spite of the high temperature such unimportant total fever phenomena, that qualitative dietary restrictions are not indicated; other cases of pneumonia have such an intense fever picture that absolutely the most scrupulous care must be exercised in matters of diet. Finally, it is to be noted, that those febrile diseases which are generally very serious, such

as typhus, meningitis, and sepsis, occasionally may present such mild symptoms as to not require the greatest care in diet which the majority of those class of cases demand.

A. In Support of the Aetiological Therapy.—A direct effect upon the bacteria or their toxines can not be accomplished by diet; however, a liberal partaking of liquids will serve as a dilutent of the poisons circulating in the blood and thereby assist in their elimination through the kidneys and skin. A flushing of the body should be aimed at. This is not as easily done as said. Von Leyden says that in fever there is a retention of water in the cells of the body. Herz, an eminent investigator and author, supports this imbition theory of Von Leyden and gives it as the apparent cause of fever. At least the restricted peripheral circulation and the extreme inability to perspire, so very characteristic, would strongly suggest this. The kidney functions are seriously affected thence the increased elimination of water by the lungs and by insensible perspiration. . And for the same reason, the relation between the amount of liquid taken, and the total urine eliminated, is generally unfavorable toward the latter.

We are enabled to increase the diuresis by the liberal supply of beverages. Nourishing liquids are better than simply water. The diaphoretic treatment of fever is to be carried out with caution, because by applying warmth to the already inadequately heat radiating body, we may increase the destructiveness of the fever. However, some conditions are determined empirically, in which artificial perspiration is very beneficial to the fever patient. Far more essential is the increase of the diuresis by drinking which we regard as a direct support of the aetiological therapeutics.

B. Dietotherapy, a part of the Antipyresis.—When old medicine permitted the patient to starve, it did it chiefly on antipyretic grounds. It was feared that by the taking of nourishment the heat production would be increased. We know better today. We know that the temperature elevation in the fever patient is to only a very insignificant degree due to heat production. The lessening of heat elimination is the cause of hyperthermia. Indeed a well person may eat ever so much and yet there arises but a very slight and temporary temperature elevation, and this increased heat production rapidly passes away. It is therefore indifferent whether the fever patient eats much or little since his heat radiation is very imperfect. Hosslin demonstrated in a number of cases that the temperature in fever is not caused by nor increased by the taking of food.

If no influence on the heat production be caused by the diet,

perhaps in a small way a certain amount of heat abstraction may be accomplished thereby. Artificial heat abstraction as is practiced in hydriatic procedures may be assisted by the temperature of the proffered nourishment: i. e. Liquids that are given the patient should be made as cool as possible. The quantity of heat which is drawn from the body in order to raise 4 liters of liquid nourishment from 6 degrees C. to 39 degrees C., (42.8.F to 102. 2F.) can hardly be considered, in contrast to the immense amount which is retained by the patient; but we are always justified in regarding this as an antipyretic action of the diet.

C. Diet as part of the Stimulation.—Among the stimulants for the nervous system and the heart are coffee, tea and alcohol No one contends that strong coffee, strong tea and alcohol are not invaluable in collapse states of fever patients. Wine and cognac are regarded by many as excellent articles of diet in most cases of fever. In stimulating the nerves and reinforcing the heart, alcohol is considered by many as a genuine food. The amount of alcohol that is beneficial to the fever patient, is much in dispute. Large doses of alcohol must be shunned, because they paralyze rather than stimulate, they harm rather than do good. How far can the heart be strengthened by nourishment? It is a muscle and acts like other muscles. Underfeeding causes muscles to shrink and leads to weakness. A sufficient caloric quantity of food of the protein constitituent saves the muscle substance and support's the hearts power. But for work the heart muscle needs non-nitrogenus matter—glycogen. This glycogen we know can be formed as well out of proteins as out of carbohydrates, and which in a certain sense may be designated as a heart tonic. Indeed recently it has been repeatedly shown that solution of sugar are particularly fitted to support the heart's activity and that it is superior to every other means, to rapidly increase the lowered heart power of the exhausted one. By virtue of these observations we are justified in recommending in the therapeutics of dietetic stimulation and to regard as valuable for fever patients, the carbohydrates and especially solutions of sugar.

D. Dietic influence on Kidney Function.—In severe fevers the parenchyma of the kidney is nearly always affected; mild or severe albuminuria, often genuine nephritis is caused by the elimination of the toxines circulating in the blood. Diet may prove very helpful in this condition. Abundant supply of liquids (which increases the diuresis) will serve to dilute the poison which passes through the kidney and in that way help to render it less harmful. All those dietetic experiences which have been

found useful in kidney diseases are to be considered. It is to be remembered not to feed too large quantities of albuminous (protein) food, in order, not to overburden the renal function which is already severely taxed by the elimination of the poisons; and for the same reasons if possible the following are to be avoided because of their irritating properties on the kidney parenchyma—condiments and spices, excess of salt and the organic bases found in meat extract.

E. The Formation of the Diet with regard to the Digestive apparatus.—By reason of the Fever, the mouth cavity, the stomach and intestine receive peculiar injury, to which the nutrition must be suited.

Mouth Cavity—The saliva gradually disappears in fever; the mouth becomes dry, tongue and lips fissured and coated with scabs. Chewing thus becomes difficult and in severe fevers intolerably painful. It is not well therefore to offer to the fever patient coarse food or even finely divided solid food. However there are now and then some fever patients who have no difficulty in chewing. A higher temperature alone generally does not hinder. But here also the general intoxication is the guiding principle. If we do not give to severe fever patients any solid food it is because we take into consideration the benumbed sensorium, for he who is unconscious cannot, does not, chew. It is best in these cases always to give only foods in solution or at least impalpably finely powdered food in watery suspension. The dryness of the mouth often causes great thirst, the allaying of which is often one of the real problems of the treatment.

On account of the lack of saliva the saccharization of the starchy foods is difficult if not impossible. It is altogether uncertain how far we may trust to the function of the pancreas in converting the starchy foods into sugar; indeed it is quite likely that the abdominal salivary gland is equally incapacitated and therefore one would have to depend entirely upon the intestinal bacteria for the saccharization. Therefore in severe fevers, if it is at all possible, no starchy foods should be ordered. Boiled flour broths or gruels and oven toast soaked or dissolved may be given, because the starches have been converted into soluble dextrine by the long continued high temperature necessary in the prepara tion of them. The starch molecules must be unlocked and converted before they are allowable. Milk and sugar solutions are the very best foods.

Frequent drinking of liquids and the most painstaking cleani-

ness of the oral cavity are the requirements that are to be arrived at from the consideration of the conditions of the mouth. What nature of liquids is not to be considered at this moment, but it must be given so often and so much as is necessary to keep the mouth clean and moist as in a well person.

STOMACH:—In taking up the particular indications of dietetics, which are to be deduced from the state of the stomach in fevers, it is to be noted first that there is nearly always an entire absence of appetite. While this is in part due to the modified activity of the fever stomach , yet it must be understood that the anorexia is due largely to the depression of the central nervous system caused by the fever toxines (a temporary paralysis of the appetite center). To the physicians of old the appetite stood as a sort of a watchman of health; its faiure was a sure sign of the harmfulness of feeding. Today we think differently and especially in fevers; feeding must not be neglected simply because of want of appetite.

Aside from therapy and antipyresis, there grows upon us the duty to arouse the appetite in a purely symptomatic manner. Much is to be accomplished in the selection of foods. Refreshing and delightful foods are to be selected and particular attention is to be given to the mode of preparation and the manner of serving.

Generally the less the appetite, the more is the thirst. It is noteworthy and often observed that in spite of the thirst the patient is often too apathetic to take or to ask for drink, but he drinks greedily whatever is given. Very cold drinks are relished most.

Considering the stomach, we find that the motor functions are decidely lessened in severe fevers. Little attention has been given to this fact in former considerations of this subject. Yet it is very plain without further explanation how much the entire digestion suffers from insufficient mobility of the stomach. The largest part of the food is absorbed in the intestine. The assimilation of the food and the general well being of mankind depends not a little upon the rapidity with which the chyme is transferred in to the bowel. For, if the foods are retained too long in the stomach, abnormal decompositions, gaseous and soluble fermentations compounds and putrescent products result. The consequences are varied dyspeptic complaints, vomiting and diarrhoea, and sometimes evidences of general intoxication.

Indeed a diminshed motor function of the stomach can be observed in many cases of fever. Examination of the vomit furnishes in many cases conclusive proofs. Considerable quantities of lactic acids have been found in the vomit (patients having

previously partaken of oatmeal gruels) a recognized proof of stagnation of the contents of the stomach.

We must learn from this that only small quantities of food should be given to the patient at any one time. Large qauntities of foods or liquids demand naturally enlarged motor functions of the stomach. The failure of this function renders intense decomposition liable. We must not on that account fail to give adequate nourishment. The smaller the feeding the oftener it may be repeated.

As a consequence of the ready decomposing nature of food in the relaxed stomach it must be our endeavor to avoid the addition of bacteria in the food i. e. sterile food should be given. It is in point to mention here again the value of frequently repeated mouth cleansing. But above all is to be emphasized the necessity of boiling all liquid nourishment before it is eaten. Of course we have learned in recent times that there are coupled with aseptic feeding also some drawbacks. The denuturizing the protein molecules, which takes place in the sterilization of milk to the detriment of its digestibility, takes place only after long boiling. The disturbances of health occasioned thereby make their appearance only after many months of its use as food. Nevertheless we desire it to be undertsood that all liquids before they are given to the fever patient must have been sterilized by boiling.

The secretory functions of the gastric mucous membrane are likewise lowered during fever. A lack of HCL in the stomach contents has often been demonstrated. A subacidity can be shown in very many cases of fever.

Are there special indications for diet in fever patients on account of the sub-acidity?

For a time it was thought best to predigest all protein foods before feeding them and in this way dispense with the HCL in the stomach. Buss gave only peptones and later he changed to albumoses. Since then it has been clearly demonstrated that proteins (not predigested) taken in solution or in powder are assimilated as readily as those artificially digested. This is even true in sub-acid stomachs. In such instances the vicarious action of the intestines for the stomach is shown. The vile taste of the peptone preparations and their tendency to irritate the intestine if given in large doses would operate against their use instead of the undigested albuminoids.

The diminished secretion of the HCL is a new point in support of the general principle, that the food of the fever patient should be absolutely sterile. HCL is a bactericide. On account of its absence

or scantiness the bacteria are enabled unhindered to multiply. Heretofore the less bacteria eaten with the food, the better for the patient.

THE INTESTINE.—Nothing of certainty is known about the histology nor of the secretory and motor functions of the intestine of the fever patient. In the post-mortems of those who have died of acute infections, the epithelium of the villi has undergone cloudy swelling, often fatty degeneration has taken place. From this it is to be inferred that the secretion of the succus entericus as is also the gastric juice, is greatly diminished. Clinical observation of the fever patient teaches that the muscles of the intestines lack the normal tonus. Often, indeed, complete paralysis may supervene. Nevertheless, no doubt can be entertained that in spite of meteorism and diarrhoea, the absorption of the intestinal canal of the fever patient departs but very little from the normal. This was first pointed out by Hosslin and has been repeatedly verified. Von L. and K.'s observations on many cases of high fever have been that from 89-94% of fresh easily digested fats are absorbed and that not more than 9% albuminoids failed to be absorbed. The carbohydrates have been found in the feces of the fever patient only when unnaturally large quantities (especially sugars) had been eaten, or when the patient suffered from profuse diarrhoea. We would conclude from these observations, that in a general way, the condition of the intestines appears to exert little or no influence upon the nutrition of the fever patient. Sluggish peristalsis with chronic constipation often occurs in fever, mostly because of the continued recumbency. An influence for nutrition is not generally exerted thereby. It would be necessary to have an opening of the bowel before such be accomplished. Diarrhoeas under certain circumstances may be caused by the fever toxines, but in the main they are due to the local disturbances in the small intestines. If the diarrhoeas are profuse then the absorption is decidedly poor. They demand most careful treatment.

F. Diet Influencing the Metabolism.—Thus far we have considered only the externals in matters of diet, the intrinsic we touched only in passing.

Now we must answer the following questions:

1. How much nourishment shall be given to a fever patient in 24 hours?

2. In what proportions (after having established the quantity) shall the nutritive constituents be given?

A well person, we know, who works moderately, needs in 24

hours about 3,000 calories and these are best proportioned into the following nutritive constituents:

Proteins	100 grams	410 Calories.
Carbohydrates	400 grams	1640 Calories.
Fats	100 grams	930 Calories.
Total		2980 Calories.

But before we prescribe quality and quantity of nourishment for a sick person, we must know whether his metabolism really corresponds with that of a well person or whether on account of the sickness, his metabolism has been altered. If the metabolism is altered by reason of the disease then the nutrition is to be adapted to the altered metabolism. In this way only can a real "Dietotherapy" be developed when success is achieved in combatting disease by prescribing the proper diet. Is there a special modification of metabolism due to fever and in what does it consist?

Even ancient medicine perceived that there was a change peculiar to fever in the metabolism. The heat of fever appeared to the ancient as an expression of increased oxidation, increased destruction of tissue, which naturally led to emaciation. In order not to increase the fire, by the introduction of fresh fuel, they believed that feeding should be restricted as much as possible. Modern investigation also, has placed emaciation as the central point of the symptoms of fever, that one of the real problems of the treatment of fevers is the counteracting of this body consumption.

What is the cause of emaciation in fever? Partially, indeed, because not enough nutriment is given. He who suffers hunger or who does not receive enough food, becomes emaciated. But primarily it must be remembered that the loss of body weight is decidedly greater in fever than in starvation. Fever patients are often observed greatly emaciated who have apparently received no small amount of nutriment. There must be some other factor besides starvation that causes the breaking down of the tissues in the fever patient.

In order to understand this subject of tissue disintegration it is necessary to investigate the subject a little more thoroughly.

In fever, nitrogen elimination is greatly increased. Since first pointed out by Traube-Jochmann, this fact has received many new confirmations. It is well a established truth. These numerous observations have also, at the same time, established the fact that the quantity of nitrogen elimination is amply independent of the nutrition and that it varies in intensity in various febrile diseases. We are in a position today to definitely affirm

first, that the increased elimination of nitrogen is only partially dependent upon the scant nutrition. Secondly, that there is a breaking down of the body proteins, which is specific for febrile diseases; and that it agrees with the modern accepted conceptions when we assume, that a direct effect of the fever toxin causes the tissue cells to break down and thus increases the quantity of the circulating proteins.

The increased elimination of CO_2 is relatively much les Naturally the increased destruction of the protein substances will manifest itself in the elimination of CO_2 and under circumstances cause an increase of the same. The increased labor of the muscles of the heart and respiratory apparatus, lead to an increased consumption of non-nitrogenous substances. Finally the involutary muscular jerkings of the febrile patient must be regarded as increasing the CO_2 elimination.

Yet in spite of all these factors, the height of the CO_2 elimination is not very great. At any rate there is nothing specific to the febrile process in the relation of the fat and glycogen metabolism or at least only so much as leads to an increased muscular activity in the fever process.

From this we are justified in arriving at the conclusion that the total metabolism of the febrile state is but slightly increased—that this increase may be given as from 10 to 20%. Since nourishment is for the express purpose of replenishing the broken down tissues, according to these considerations, it would be estimated that the total caloric requirements would be placed at 3300. If we would take as a comparison a well—not working person, in bed, whose caloric requirements ought not to exceed 2400 calories, it would cause us to reduce the febrile persons requirement to 2500-2700 calories. This same result is arrived at also, if we calculate the energy requirement from the metabolism (the N and CO_2 elimination).

If it is possible, in spite of the above mentioned difficulties, namely:

1. Kidney Function Altered.
   - a. Not too large amounts of protein foods.
   - b. Meat extracts.
   - c. Excess of salt.

2. The Altered Mouth Condition.
   - a. Chew, inability to.
   - b. Insalivation, inability to, from lack of saliva.
   - c. Pancreatic juice also lessened.
   - d. Appetite, lack of.

3. The Altered Stomach.
   a. Impaired mobility, causing decomposition.
      Large meals require large motor functions.
   b. Impaired secretory function.

to feed the fever patient the total desired quantity of about 2500 to 2700 calories, there will obviously be enough nutriment to avoid starvation and to supply the demands of the over-exerted muscles, without tissue destruction. But the question arises here: Will the increased caloric supply be adequate to influence the tissue destruction? Can the nitrogen elimination be reduced to normal by the nutrition? As far as it concerns the nitrogen elimination in starvation, it can be answered in the affirmative. But as far as it refers to the toxic effect of the fever, it can not be maintained that the increase of the amount of nourishment can arrest the effect of the toxines upon the protoplasm. According to our idea the toxines of the fever break up the proteins of the cells and tissues, causing them to float in the circulation, where it becomes oxidized into urea and CO_2. If the cells, in spite of the fever intoxication, possessed the capacity to absorb albumen, they would not need to wait for the albumens of the food, for they could assimilate the albumens set free by the fever toxine. But since this manifestly does not happen, we are, therefore, to conclude that the protoplasm of the cells intoxicated by the fever (as long as it is under the influence of this poison), has lost the function for assimilating the albumins. These theoretical considerations lead to the following conclusions: The fever patient should receive a liberal supply of food. Thereby the burning up of non-nitrogenous substances of the body will be prevented and at the same time provision will be made that the cells will retain that albuminous tissue, which would be destroyed if not enough non-nitrogenous food were given. Abundant supply of nourishment will limit the fever consumption, but that it will completely cover the loss or even make an increase over and above the loss, diet in acute fevers, will never be able to accomplish, be it ever so generous.

DISCUSSION.

Dr. O. P. DAVIS, of Topeka:—What I would first say would be in the way of appreciation of this thoughtful and sceintific consideration of the subject. I think our profession has been somewhat too negligent of the scientific study of dietetics, particularly of the phase of dietetics which has to deal with the sick individual. Diet tables have been worked out pretty scientifically for the feeding of soldiers, but the medical profession has approached the subject in its bearings upon the sick with a rather vague and uncertain manner. The question of quantity has been considered rather than the question of food value. We have cherished many a fallacy along these lines, some of them have been alluded to, and others might still yet be alluded to. The main thought that impressed itself upon me as being the most practical one was the sentence that the fever patient must not be exposed to the dangers

of enervation. He has enough to contend with from within without being in danger from deprivation from without. In feeding the patient the main considerations have been mentioned by the author of the paper. He has given us very exhaustively the ideas and plans that should be kept in mind when we are feeding the patient, but these may be concentrated and boiled down into a statement like this; That sufficient proteid must be given to protect the patient from protein loss, and sufficient heat value to conserve the body fats. If we could do this the goal would be reached, but we have to contend with forces that are not always easily recognized. We can in a certain way compute the nitrogen loss and possibly we can form some idea of the CO_2 loss, and with these as a basis we can form our diet plans, keeping in mind the number of calories that are required for the patient. A fasting patient or a patient who is not laboring, we must try to make up a diet table that will furnish at least that much heat value and force value. We have been inclined too much to respect milk as the chief basis for diet in feeding fevers. We have been content in the past if we could get our patient to take two quarts of milk a day, we have congratulated ourselves we were feeding him nicely, but when we stop to think two quarts of milk only represent something like 1200 calories we can see we are very inadequately supplying the needs of the patient; even if he were not sick he would be getting far from the required amount of food.

Dr. M. F. SUDLER, of Lawrence:—In regard to the cellular pathology of fever the doctor has very well brought out. I heard a recent lecture by Dr. Chitman with reference to nutrition, and it struck me as having some bearing on this point. He laughed at our old ideas whereby the proteids were supposed to be broken down and resulting in a similar chemical compound, and he said our old ideas were that certain forms went through the digestive tract and were absorbed; his investigations seemed to show that the compounds were very much more simple than had been formerly thought and that these simple compounds were picked up probably and reconstructed in some way in the blood, and when they get to the individual cell it had its own ferments, so that the proteids which formed that particular cell were specified for that particular cell, whether it was one in the brain or in the liver, that they were all different and that they posessed each one its own chemical labaratory to manufacture its own food, so when we come back to this question of feeding, we have to consider just that point, and it seems to me Dr. Minnenger brought it out in his paper, that these cells do act queerly, do not act like normal cells, and this little observation fits in with that point of view.

Dr. H. B. CAFFEY, of Pittsburg—This subject is certainly a very interesting one, one which we general practitioners are more or less interested in. I have enjoyed the paper very much, and the discussion, but I don't believe that the fever patient requires the amount of food or the number of calories for his sustenance that a man in perfect health would require. I believe that we are up against the proposition of sustaining the system which is being attacked by disease but in a way which will not overtax the digestive powers. We know that fever is a pathological process resulting from the failure of the nerve centers to control tissue repair and tissue integrity, through which the transfomation of energy into tissue building force ceases, and transformation into heat ensues, and during which through the same nerves' failure the tissue or blood becomes subject to combustion, so that if we can sustain our fever patients so as to counterbalance the tissue's destruction, and add to his powers of construction, and at the same time giving him the proper sustenance to his digestive organs, we will accomplish in my opinion, the greatest amount of good. There is no question but that fever patients, even in judicious feeding, can be easily overfed.

(No closing discussion.)

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Psychology in medicine or suggestive therapeutics is mental materia medica, and the physician who fails to use it treats only one-half of his patient.

SCREW WORM DISEASE—(MYIASIS.)

ZACHARIAH NASON, M. D.,

AND

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In the Journal of the American Medical Association for December 7, 1907, Doctors Yount and Sudler report twenty-three cases of human myiasis (compsomyia macellaria—Fab.) occurring in Arizona.

In the Kansas City Medical Index for December, 1897, Dr. Hal. Foster reports a case in which he found 207 screw worms, and refers to two other cases where only three and five worms were found. In all, the chloroform was the effective remedy.

In Bulletin No. 5, of the U. S. Department of Agriculture, a very good account of the screw worm is given by Dr. Herbert Osborn, Professor of Zoology in the Iowa Agricultural College. In this account due credit is given to our Professors Williston and Snow for their notes on the disease, published in the early 80's.

Recently several cases have been found in and about Kansas City of which we had the good fortune to see one. We present the case history herewith in order to call the attention of the physicians of Kansas to what we believe to be a rather frequent (and if unrecognized, fatal) infection during the warm seasons of the year. Another case came to post mortem and showed very little beyond the perforation of the bones and the irritation of the mucosa. We feel the more justified in presenting this report because most of the cases of which we have learned were unrecognized until very late in the course of the disease.

Case History—Dr. Z. Nason's report.—Arthur B., 825 Coy St., Kansas City, Kansas.—On September 19, a blow-fly got into his right nares. On September 25th he noticed a tingling in his nose and frequent sneezing. On September 26th he reports that he noticed a sense of fullness in his throat, and he thought he had some fever, rapid pulse, loss of appetite, and some headache. On September 27th the symptoms were very much worse—chills, higher fever, with pain in throat and head. On September 29th I was called at nine o'clock in the morning. I found temperature 101; pulse, 108; respiration irregular; great difficulty in swallowing, accompanied with much pain-; marked constipation; total loss of appetite. On examining the throat, I found the back part of mouth and throat much swollen, oedematous, some odor. On ex-

amining his pillow I found blood stains. I was called again the next day, and found temperature 102½; pulse, 120; breathing and swallowing difficult; swelling decidedly marked on right side of throat and mouth. It had all the appearance of an abscess; and indeed the symptoms were that of quinsy which I thought it to be at that time. When I called on October 1st, I found that the abscess had broken during the night. He said there was a marked elimination of pus; temperature 99½; pulse, 98; breathing normal; swelling and redness much less. In fact, he had improved in every particular. After this visit he began to bleed freely from the nose. I was recalled. While packing his nose to relieve the hemorrhage, patient spat up a large clot containing 21 maggots. Bleeding stopped. Patient comfortable. On October 2, 3, 4, and 5, patient rapidly grew better. On the 5th, I sent him to Eleanor Taylor Bell Memorial Hospital for examination and report.

The treatment in the early part of the case was simply calomel in broken doses, saline laxative, astringent gargle, with hydrogen peroxide. Strychnin was also given to sustain the heart, and phenacetin 2½ grains, at 3 hour intervals, for the fever. When the screw worms were discovered, I injected a 50 per cent oil solution of chloroform into the throat and nose twice daily.

Hospital Notes.—The patient entered the Eleanor Taylor Bell Memorial Hospital on October 5, at 2:00 P. M. His temperature was 98.4; pulse, 70; respiration, 19. On examination, spots lighter and more yellow than the somewhat inflamed mucous membrane were disclosed on the right side of the palate and on the right pillars of the fauces. Two of these spots were also near the middle line close to the junction of the soft and hard palates. When probed, these spots proved to be necrotic but empty. The right nostril was edematous, and yielded on cleansing considerably bloody mucus. The right submental region was swollen and there was a feeling of lumps underneath the skin. The uvula was edematous; the right eustachian tube was widely open, and because of the patient's sense of something in the ear, this was probed, and irrigated, but nothing found therein. The blood analysis gave the following result:

Hemoglobin,	70. %
Red cells,	4,320,000. %
White cells,	5,600. %
Polymorphonuclear neutrophiles,	52.5 %
Large lymphocytes,	33. %
Transitional cells,	4.5 %
Eosinophiles,	2.5 %
Basket cells,	1.5 %
Degenerate cell forms,	5. %

Considerable variation in the size and staining quality of the red cells was noticed by Dr. Trimble who made the examination.

The patient was treated by irrigation with hydrogen peroxide and the local application of an oil solution of chloroform.

The next day the patient felt much better; and when the examination showed that the nostril and throat were in a more nearly normal condition than the day before, he was allowed to go home, with instructions to report to Dr. Nason.

The patient reported to Dr. Nason on Oct. 7, 8, and 10, and outside of some soreness in the throat and right ear, the recovery seemed to be complete.

DISCUSSION.

Incubation—Inasmuch as the eggs hatch within a few hours, and the larvae require a week for developing into the adult fly, the incubation period might be spoken of as one week. In our case it should be noted that the first symptoms appeared on the 25th; while the blow fly invaded the nostril on the 19th.

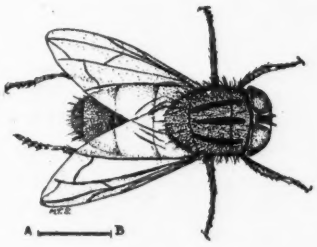

Fig. 1.—The adult screw worm fly (Compsomyia macellaria—Fab.) magnified 3.5 diameters. The line A B is the actual length of the fly.—(Sudler.)

Pathological Anatomy—In a recent fatal case in Kansas City the post mortem examination developed nothing more than reddened and eroded cavities throughout the ethmoidal and frontal bones. In other words, there seemed to be nothing except the evidence of the local habitation of the worms. In our case there was the evidence of beginning necrosis of the palate. In the fatal cases reported by Osborn, we find the following notes:

"Azara was, I believe, the first observer who noted cases of human myiasis in South America. Coquerel, many years later, called the attention of of physicians and naturalists to the frequent and fatal accidents which this evil produces among the exiles of Cayenne. According to this author, Dr. Chapuis, physician in chief of the French marine, attended one case in which the larvae of C. macellaria had penetrated the frontal sinuses, causing the

death of the patient; also one very unclean person attacked in the nasal fossae and the pharynx, who succumbed after he had ejected one hundred and twenty larvae. There were, as M. St. Pair observed, in the same country six similar cases of which three terminated in the death of the patients after cruel sufferings; in two the nose was destroyed, and in the last there was a deformation of the olfactory organ. In another case observed by M. St Pair there were removed by means of injections, more than three hundred larvae, but he was not able to obtain them all, and the remainder soon penetrated the ball of the eye, destroying the lower eyelid in consequence of gangrene, invaded the mouth, corroded the gums, and laid bare the inferior maxillary. The victim died seventeen days after his entrance into the hospital."—Williston, translation from Arribalzaga.

"Upon a very minute and careful examination after death I was astonished to find that all the tissue covering the cervical vertebrae, as far down as I could see by throwing the head back and compressing the tongue, was wholly destroyed and the vertebrae exposed. The palatine bones broke with the slightest pressure of the finger. The os hyoides was destroyed and the nasal bones loose, only held in position by the superficial fascia."—Britton.

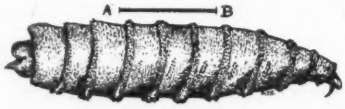

Fig. 2.—Larva of the screw worm fly (Compsomyia macellaria—Fab.) magnified 3.5 diameters. The line A B is the actual length of the maggot. —(Sudler.)

Symptomatology—The symptoms are those of the presence of pus, the pain being severe on account of the great tension. When the over-lying membrade breaks the discharge is of a sanguineous type.

Mortality—Dr. Sudler reports the mortality in the cases which he collected from literature and from the practice of Dr. Yount at 15 per cent; that of the nasal cases alone being 22 per cent.

Diagnosis—The diagnosis can be made only by stimulating the maggots to show themselves; and for this purpose chloroform seems to have been the best application. Aside from the finding of the maggots there seem to be no symptoms that are pathognomonic. But suspicion of the presence of the screw worm is justified in cases where the symptoms of nasal or tonsillar abscessor even of diphtheria—are accompanied by blood stains on the pillow.

Treatment—The treatment must be the removal of the maggots, and as noted above, these appear only when stimulated by the application of chloroform. This should be applied, diluted with olive oil, on a swab as well as with a spray. In addition to the use of chloroform, the free application of hydrogen peroxide has proven very helpful. This should be used in full strength of

the commercial solution and put in with a syringe. Its mechanical action also will tend to expel the worms.

We are indebted to the Journal of the American Medical Association for the cuts which illustrate this article.

Fig. 3.—Egg of the screw worm fly (Compsomyia macellaria—Fab.) magnified 30 diameters. The line A B is the actual length of the egg.—(Sudler.)

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THE OPPORTUNITY AND DUTY OF THE KANSAS MEDICAL SOCIETY.

By W. H. GRAVES, M. D. Wichita, Kans.

Read before the Kansas Medical Society ar Iola, May 7, 1908.

This is a paper with a prelude. That I may not be open to the charge of sordidness in dealing with the subject, I beg that what I have to say as to the financial side of the practice of medicine be interpreted in accordance with the spirit of these halting lines:

LABOR DULCIS.

"—who went about doing good"—Acts 10:38.

Oh, Thou, who once didst walk the earth with healing in Thy touch,
And bring sweet rest to weary frame, and peace to anxious mind:
Grant me, Oh Lord, this gracious boon: In service to my kind
To live my life, secure from lure's vale and penury's clutch;
The welcome treasure Thou has given, the crown of fruitful years,
To lay upon the yearning breast of blessed motherhood;
Pain to relieve and life to save; to smoothe the rugged road
Of him whose tale of life is told, whose journey's end appears;
To cherish childhood, soothe its griefs, and all its ills assuage;
To win from error's devious ways the feet of ardent youth;
To armor manhood with the stainless panoply of truth;
To guard the faltering steps, and cheer the heart of fainting age.
Be this my joyful labor; this my pledge of brotherhood:
My high ambition—fellowship with Thee in doing good.

—o—

That a man should approach mature life with a high purpose to do worthily a man's work in the world, to be of signal service to his fellows, to deserve and enjoy their esteem, is altogether credita-

ble to human ambition. Nowhere is this noble desire oftener found than in the medical profession.

That, as life advances, his hopes should fail, the visions of his youth grow dim, and his ambitions die in a sea of disappointment and apathy too deep for plummet to sound, is anything but creditable to human intelligence. And in no profession is this infinitely sad ending so common as in the profession of medicine.

Sixty-two years ago in New York came together the first delegate body of physicians for the purpose of forming the American Medical Association. A young man had a vision of the good that could be accomplished for and by his beloved profession by organized and concerted action; and in 1846 the American Medical Associaj tion was born for the purpose of securing the adoption by all the medical schools in the United States of a requirement of a suitable preliminary education, a uniform and elevated standard of requirements for the degree of M. D., for the goverment of the entire medical profession by the same code of ethics, the establishment in each state of a single board of medical examiners, the enactment in each state of suitable laws for the registration of births, marriages and deaths, and the adoption of a nomenclature of diseases.

This young man had a vision of a profession, every member of which should be a man of trained intellect before beginning the study of medicine, and who should before entering upon the practice of the healing art, give ample evidence of systematic and thorough knowledge of medicine to a board entirely independent of any influences or motives other than that of carefully ascertaining the fitness of the applicant for the responsibilities of the physician.

Four years ago we laid to rest the body of this erstwhile youth, grown venerable, and universally venerated. His life was unparalleled among American physicians for fruitful industry; and his just fame as a great physician and scientist is only surpassed and in a measure obscured by his greater fame as the organizer of the medical profession into a body of scientific men actuated by a love of knowledge and cultivating to the highest degree the ability to use that knowledge in the alleviation of the sufferings of their fellows.

It is not often given to men to see, in their old age, such rich fruition of the hopes of their youths as Nathan Smith Davis enjoyed. Dr. Davis saw the fulfillment of the purposes for which the Association was formed, except as to the provision for the registration of births, marriages and deaths. Progress in that field is slow. But in the field of medical instruction the actual accomplishments of the past sixty two years have surpassed the brightest dreams of the great founder. This is no time to compare the magnificence of the

present with the meagerness of the past, language would fail of adequate comparsion, and the achievements of recent years are familiar to you all. And this equipment great as it is, is but a promise of that which is to come. For medicine has not arrived at the zenith of its glory. There are still some obstacles to be overcome.

There is no profession that so appeals to the eye, the imagination, the love of one's kind, as the medical. None begins to compare with it in the value of the material with which it has to do, the closeness of touch with the highest and best in human kind; none so exacting in the requirements of devotion and self-abnegation when engaged in the performance of its functions, and the readiness of its followers to face danger at the call of distress. No other profession to-day requires such an expenditure of money, and energy for the acquirment of reasonable ability to perform its duties; and in no other profession are shown higher ideals of duty and service to humanity. On the other hand, in no other profession is there exhibited so great negligence of the requisite means for carrying these ideals into effect, and making the visions of youth the realities of later life.

The scientific side of medicine has been developed far out of proportion to the business side. We have been so anxious to relieve suffering and save life that we have given comparatively little attention to the subject of compensation for our services. We freely care for the poor in hospitals and for some who are not poor. We treat without price uncounted thousands at public dispensaries. We are so anxious to do good and accumulate a large list of patients that we are easy marks for the rounder, and gladly welcome him to our office when our colleague across the street has driven him away by his belated demands for compensation. We feel honored by being elected physician to a club organized for the purpose of getting medical services for less than cost; and have an overwhelming sense of our dignity when we have been initiated into the order of the mystic pass in return for personal services to a job lot of railway employes. We scrap with each other for the honor of being county physician at half the salary paid the county attorney, though the lawyer does far less work and has not a tithe of the responsibility. We devote time and skill in making insurances examinations for a dollar when our juridical brother would get from five to ten times the amount for a like expenditure of energy. We are so devoted to raising the standard of medicine and so afraid of the contamination of politics that we permit osteopaths and christian scientists and fakers of all kinds to enter into our field of usefulness and compete with us on equal terms to the

detriment of the public whose guardians we are in matters relating to their health, instead of using the power that we have with the public and compelling these gentry to submit to the same tests which we rightfully require of legitimate medical men.

The financial problem is of prime importance; for while there can be no improvement without the vision, without the desire to improve, neither can there be improvement without the means to put that desire into execution. Thus we are face to face with a business condition which has a direct bearing on the scientific side of medicine. For it is clear that if the physician can not in the long run obtain an adequate compensation for his services, the character of the services must deteriorate.

The public esteem the profession of medicine highly. Sometimes I think that this esteem partakes of the nature of a superstition; for they are often just as deferential to a pretentious man of mediocre attainments as to a man of great learning and ability; but the esteem of the profession is a fact. While many are afflicted with the erroneous idea that there is an occult something that in a mysterious way prepares the doctor for the practice of medicine, and while many are lured into the advertising faker's net, and while many are drawn into a fatuous faith in various pathies by the loud claims of their practicians and exploiters; under and through all this blundering is a faith in the medical profession and a belief in its scientific ability and I have never yet found a disinterested man who does not readily acknowledge the propriety of requiring the same tests of ability on the part of all who undertake the practice of the healing art, whether they are physicians or those who call themselves by some other name to cover their advance into the field of medicine.

In addition to the advancement in medical education and in the education of the Public to a proper appreciation of the value of scientific medicine, which will soon be undertaken on a large scale by the American Medical Association, we need more efficient regulations of the practice of medicine. And here lies the opportunity and duty of the Kansas Medical Society.

It is a false modesty that would shun this task. It is our duty and the cry of personal profit that is hurled at us by the incompetents who have tried with greater or less success to take a short cut to the practice of medicine, ought not to deter us from its performance; should not have any more effect than when made against the faithful sentinel who warns the camp of the approach of the foe. And it is a dishonor and a disgrace for him to remain silent under such circumstances, so ought it to be a dishonor and a disgrace for

us to fail in our care for the public health. And as the faithful soldier is honored by the beneficiaries of his devotion. so shall we receive the reward of high esteem and deserved honor if we faithfully perform this duty.

The State Medical Society must undertake the reformation, and assist in the enforcement, of the medical laws of the State. There is no reason to fear that our proffer of assistance will be rejected by the authorities. On the contrary, there is every reason to expect that it will meet with a cordial reception.

It is the obvious duty of the Kansas Medical Society to place at the service of the State its scientific skill and professional knowledge in assisting the authorities, and especially the legislative authorities, to conserve the health of the citizens. And as a rational movement to that end, I suggest the appointment of a committee who shall have authority to employ competent legal assistance in framing a bill for the more efficent regulation of the practice of medicine to be presented to the legislature at the approaching regular session. I suggest also that the committee be composed of men who have an active interest in the subject, and whose residences are such that they can meet occasionally without great expense of money and time. It is far better that the committee be selected from a single city than from cities so widely seperated that they can not get together often enough to accomplish anything.

One of the first changes that such a committee would probably make would be to impose on the Governor the duty of consulting the Kansas Medical Society or the Faculty of the Medical Department of the State University in selecting men for the boards of medical registration and examination, and of public health. We should then be free from reproach, as to one of these boards, of having a set of officers to administer the law who have no interest in its operation beyond their fees. And incidently we should not have to bear the reproach of withdrawal of reciprocity by other states because of a too previous distribution of examination questions.

In such a plan as this the Society would have an executive officer who would devote his whole time to its interests and be compensated accordingly. He would be Secretary, editor of the Journal and general organizer. He would keep in touch with the county societies all over the State, and his occasional visits, with the counsel and assistance which his broad experience would enable him to give, would be valuable,. In this way he would do part of the work now done by the Councillor and greatly relieve that overburdened and self sacrificing officer. With his aid the county societies would

work more efficiently in the enforcement of the law and as an active officer he would be a valued assistant to the committee on legislation.

He would study the various problems that effect the financial side of the physician's life, as for example the contract practice problem, above referred to, and gather together data touching this important and heretofore detrimental factor in the practice of medicine.

With these agencies effective, the A. M. A. in the role of educator of the public to a better appreciation of the practice of medicine, and continuing the magnifient work it has inaugurated, in the critical examination of the teaching of the medical colleges on the one hand, and of therapeutic agents on the other; with the State Board working harmoniously with the Association and the State Society in carrying out the provisions of well digested State laws and counselling actively and efficiently with the legislature as to what those laws should be; and with the county societies putting into motion the machinery of those laws against unlicensed and criminal practicians, the practice of medicine in the State of Kansas will soon rise to a higher place in the public esteem, and scientific physicians will far more nearly than now realize their early dreams of efficient service to their fellows with the emoluments, material and honorary, which that service should bring.

DISCUSSION.

Dr. E. J. LUTZ, of Kansas City, Kansas:—I have listened with great pleasure to the paper of Dr. Graves. The opportunities and duties of the Kansas Medical Society are great. He speaks very well, we devote too much time to the scientific part and not enough to the business part. Not very long ago I had the pleasure to find on the streets an open letter from an osteopathic society, and the top of it read "Self Preservation is the First Law of Nature". I read the letter, and it stated that there would be a meeting of the osteopaths of that city to discuss rules and regulations, and so forth, and bills to present in the next legislature. I knew who the different osteopaths were of the city, I knew who their stenographer was, and got next to him, and that so-called scientific meeting was nothing else but a business meeting, what to do with the legislature, when to get next to it, not when they meet in Topeka, but to get next to them when they run for office. We have so little time, the business portion is done by 25 or 30 members you must sometimes pardon my speaking of matters we know,—probably a great many of us don't know those things. The American Medical Association is busy, they have organized in the last two or three months and directed each committee from the state to name one man in each county to act as auxiliary men to that committee, and inform them of what is needed. The tuberculosis question, that is up, and then some amendments that are necessary in regard to Board of Health, to give them more power, all those opportunities and duites that the Kansas Medical Society has, and it is our duty to get busy beforehand, not afterwards. I was instructed by the American Medical Association to procure an active physician in each county, to get the name and correspond with him, and after the details are given to me by the society here and the A. M. A. to notify them what we need in the next legislature so we can go before the legislature and demand these things because our constituents demand them. I believe if we act

along that line and organize and get busy and do those things beforehand. like the politician does, he gets busy and says "I will do so and so for you if you will do so and so for me,' you have got to tie them down, unless you do that you will not succeed. We have got to use politics a little in that. We have got to be smooth and make it the order of business as physicians.

Dr. J. F. GSELL, of Wichita—It strikes me Dr. Graves made a suggestion in his paper that is a good one, and one that is well for us to consider as The Kansas Medical Society. The doctor suggests in his paper the advisibility of electing a secretary for the State Society and selecting someone who can give his entire time to that work, and the duties for the secretary such as outlined in his paper, one of his duties being to deal with the legislation. Too often the work of a committee or several committees, the work is not accomplished. Very often one man would be able to accomplish things a number of men would not accomplish, and I think that thought is one we can well take into consideration, and might at least in the next few years, adopt.

Dr. HOPKINS—I notice an allusion to the examination questions from the State Board of Registration of Kansas, and withdrawal of reciprocity of Missouri, and I think inasmuch as our state board to a certian extent is supposed to represent the State Society in its official actions, it would be well if Dr. Light who is on the floor would tell us something about that examination and show us the Board is not so much at fault as the allusion would lead us to believe.

Dr. G. C. GLYNN, of Iola—It seems to me the way to influence the legislature or any other man is to produce the facts where the men can see them, give them the evidence, and the way to produce the facts is to find out what the facts are, and the best way in the world to find out the facts in this state or any other state is to commence with the city. The plan that could be suggested that would do more good than any other is to let each city in this organization stand for a uniform accounting system, that way the business man will see the advantage of them; and the State of Ohio in the course of 18 months saved the citizens of that state two million dollars. That appeals to them. In addition to that, the statistics can be put up to them, and you can start in on the counsel and you can go to the legislature and say: "Here are the facts." "It is an economic proposition to save lives,' and in that way youcan get to the legislature. You can say: "Gentlemen, we are in position to tell the facts." We have lowered the death rate in Iola just on that plan, and it is a business proposition. We can show you where we have removed the filth and we can show you where the people are breathing free from the effects of it, and if you can put it into this condition and put in a uniform accounting system, you can get the support of every municipality in the State of Kansas, and when they get up there and see we have delivered the goods at home, they will come through.

Dr. GRAVES,:—(Closing the discussion.) I am very sorry not to hear from the State Board. What I saw was in the public print, and it wasn't all I heard of the unfortunate dissemination of the examination questions. I was told authoritatively by a medical student that wasn't the first time that had occurred. I am not blaming the Missouri State Board,—I don't want to be understood as casting any reflection on them. As regards the practical working of the plans I have suggested. I don't claim any originality. It was first suggested to me last summer by Dr. Simmons. What is every man's business is no man's business. That was the object of the paper and was all I intended to impress on the Society.

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Simplicity in dosage marks the intelligent and safe internest.

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Mixed or complex dosage is an abomination to the apothecary, is liable to be an incongruity in chemistry, and questions the diagnosis of the physician.

THE JOURNAL
OF THE
Kansas Medical Society.

JAMES W. MAY, - - . . - - EDITOR.
J. E. SAWTELL, } ASSOCIATE EDITORS { CHAS. S. HUFFMAN.

Subscription Rates: $2.00 per year, 20c single copy. Advertising rates furnished promptly on application.

The Journal was established in June, 1901, by a publication committee at Topeka. In May, 1903, Dr. G. H. Hoxie was elected editor and served four years. In January, 1904, it incorporated the Wichita Medical Journal, owned by Drs. W. H. Graves and G. K. Purvis, and the Western Medical Journal, owned by Dr. A. J. Roberts, of Ft. Scott. In March, 1908, it incorporated the Wyandotte County Medical Journal, owned by Dr. James W. May. It is now printed in Kansas City, Kansas, and appears the first of every month. Correspondence should be addressed to the editor. Editorial office, 501-2 Husted Bldg., Kansas City, Kans.

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EDITORIAL

The "pen is mightier than the sword," so the saying goes, although there are few indeed who would not rather risk a duel with the former than the latter.

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County Secretaries are urged to send in reports of the meetings held in their districts, and also items of medical interest. This Journal is for the physicians of Kansas first, last and always and should be used by them. Stimulate your meetings by publishing accounts of them in the Journal, and let outsiders know you are alive.

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Dr. S. C. Emley recently called attention to the use or rather mis-use of the terms tubercular and tuberculous. He says at this time the former is used so many places when referring to a disease caused by the tubercle bacillus. It would be better to confine the word tuberculous to those diseases caused by the tubercle bacillus and let tubercular be used when we mean a lumpy or nodular lesion which may be either tuberculous or syphilitic. In other words, it would be better to use tuberculous when we mean disease caused by the tubercle bacillus because tubercular has reference to shape

rather than origin and may be either a tuberculous or a syphilitic lesion. You will notice the best writers make this distinction.

The doctor's point is well taken and the above correction should be adhered to.

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Time and progress does most certainly change the methods of prescribing and dispensing of drugs. The old idea of incorporating in a prescription a drug for every symptom manifest, and some that were not manifest, is obsolete. Mono-therapy bids fair to assume its just position and hereafter in place of prescribing for every symptom, one drug will be given for the whole chain of symptoms. It is obvious how much will be gained by this proceedure, for when there is improvement in the patient it will be known to which drug belongs the credit and vice versa.

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The idea was recently advanced by someone that a great many of us make the mistake of an incomplete diagnosis. For instance, that having examined a patient presenting symptoms of a certain ailment, the examination is stopped and the patient put upon treatment without going further to find the co-existence of other diseases. This is a fault that a great many supposedly thorough physicians are guilty of, and it simply emphasizes the fact that we must go over our patients with great care using every appliance, old and new, that will give us an insight into the true condition.

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The authorities in Kansas City, Mo., are making strenuous efforts to rid the city of druggists who have been selling cocaine and morphine without physician's prescriptions. The Police Judge has imposed the maximum fine upon their conviction in his court, with the result, that several druggists have quit business entirely and the other guilty ones have about given up the practice. This practice, which has been going on for years, and years unmolested is one of the worst offenses that a druggist can commit, for it is plainly a traffic in human souls. It is to be hoped that the crusade will be a permanent one.

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At this day and age it is an absolute necessity for the successful physician and surgeon to carry a policy for protection from alleged malpractice suits. It seems that when physicians, or, for that matter, any successful business man gets into the well-to-do column there is always some grafter or shyster lawyer ready to try and get a portion of his wealth. It is a notable fact that a very

small per cent of the suits brought for malpractice are successful. One reason for this is the fact that in a very few cases are there any grounds for suit and another is, that many of the doctors have availed themselves of the protective policy, the company agreeing to fight the cases to the last ditch.

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Kansas can be depended upon to do her share toward the prevention of tuberculosis. At the time of going to press Governor Hoch has issued a call for a conference of all who are interested in the campaign for the study and prevention of tuberculosis, the meeting to be held at Topeka, Dec. 3, 4 P. M., at Representative Hall. That this meeting promises much in the educational propaganda to work as a Kansas branch of the national association goes without saying. Everyone, in and out of the medical porfession should be interested enough, if not able to attend the meeting, to join the association by paying one dollar for membership.

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"Our name in public print" has never been the subject of any great deliberation by medical men, and it seems that many of the so-called reformers are either "chair warmers" or secretely glad to have their names adorn the pages of the public press. The ethical medical men--and our profession is composed overwhelmingly of this class—do not desire to elevate themselves in this manner and, consequently, knowing themselves as they do, hesitate to point the finger of accusation at their neighbors, therefore the guilty are let alone. This practice, which is certainly nauseous in the extreme perhaps can be corrected by having the secretary of the county society take all of the items concerning physicians and patients from the daily press and read them in open society. Perhaps after being embarrassed a few times in this manner, a greater delicacy might be engendered as to newspaper advertising.

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The medical profession is aroused to a sense of duty and of its importance and influence as it never has been in the history of medicine. Preventive medicine is its shiboleth—and preventive medicine is the medicine of the present largely and will be more so in the future.

The medical man is becoming broader in his conception of duty because he knows more and he prizes life more highly and realizes his responsibility to his fellow man more acutely because of this increased intellectual and moral point of view being more clearly defined and accepted.

To cure people when they get sick is laudable, but to prevent

them from getting sick is best. In order to keep people from getting sick their environment must be known, and if not conducive to health must be changed, modified, bettered and made sanitary. There is too much vicarious thinking done as yet. Thinking one's own thoughts is hard work and the mass of mankind is willing to let others think for them. It is the duty of the physician to educate his people in the laws of hygiene in their persons, homes and in what to eat and drink. J. E. M

CLINICAL NOTES

Dietetics is of the first importance in the treatment of the sick.

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The minimum dose should be the rule in prescribing and the maximum dose the exception.

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The specialist in medicine must ever be on his guard or his medical horizon will become microscopic.

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The old idea that there is danger of salivation when giving calomel and lemonade simultaneously is erroneous. Calomel is acted upon very slowly by non-oxidizing acids and therefore not injurious when given with lemonade.

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Pruritus Senilis.—Levy remarks in the Berliner klinische Wochenschrift, September 28, 1908, that Leo, Kohler, and Stroll state in the Therapeutisches Jahrbuch, that it is possible to relieve, and very often cure, pruritus senilis by the following:

℞ Diluted sulphuric acid,.....5.0 grammes;
Distilled water,.....175.0 grammes;
Syrup of rubus,.....30.0 grammes.
M. S. One tablespoonful every two hours.

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The following simple and efficient test for formaldehyde in milk (from Ohio State Medical Journal, Nov., 1908) may be found very useful when that drug is suspected: Introduce a little of the suspected milk into a test tube. Add an equal bulk of water and then allow a little strong sulphuric acid (containing a trace of ferric chloride) to run down the inside of the tube. Allow to stand a few minutes. If formalin be present a beautiful **violet** ring forms at the junction of the strong sulphuric acid and the diluted milk. In the absence of formalin a greenish yellow tinge is observed. The reaction if positive should occur within two minutes. The acid used in the

above test may be conveniently prepared by adding a small crystal of ferric chloride to ordinary strong oil of vitrol. The acid must be poured in a slow stream down the inside of the test tube. Delicacy of test, 1 part of **formalin** in **200,000** parts of milk.

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Cystic tumors of the breast differ from tumors of this kind in other regions, in that fluctuation is usually absent. In fact, they may give a sense of distinct hardness, so as to simulate a cancer or sarcoma. Under these circumstances it is advisable in doubtful cases to aspirate, as recommended by Abbe, of New York, using a small sharp needle.—International Journal of Surgery.

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Application for Orchitis.—The following ointment is recommended to be rubbed into the skin (Journal de medecine de Paris, October 24, 1908):

℞ Synthetic guaiacol,..... ʒiiss;
Methyl salicylate,..... ʒiv;
Lard,..... ʒiii.

N. Y. Medical Journal.

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The Treatment of Chronic Gastritis.—Kahane recommends equal parts of compound tincture of cinchona and tincture of orange peel, fifteen to twenty drops of which are to be taken twice daily before eating, or the following:

℞ Tincture of nux vomica,..... ♏ lxxv;
Tincture of orange peel,..... ʒiv.

M. et Sig: Fifteen to twenty drops twice daily before meals.—N. Y. Med. Journal.

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X-Ray Dangers and Abuses.—W. S. Gottheil, New York (Journal A. M. A., November 21), thinks that the optimistic tide has turned as regards radiotherapy in dermatology, and that we do not now hear so much of its wonderful results. Experience is also teaching us that while it may be of therapeutic use, it is also capable of doing great and even irreparable damage. Without venturing to criticise its use for other purposes, he believes that in dermatology while it has a positive value in certain conditions, this utility is a limited one, and two conditions, in his opinion, must be present to justify its use. In the first place the affection must not be a trivial one; there must be sufficient reason, either from the gravity of the disease or on account of its effect on the patient, to warrant the use of a remedy of uncertain and possibly deleterious effect. In the second place the disease must be one that is not amenable to the

ordinary accepted and safe modes of treatment. When employed it should be with caution, as its dosage is unmeasurable, the individual reaction unknowable in any given case and its results uncertain. It should also be used only by skilled operators, familiar with its dangers, and whose experience and known skill are guarantees that all needed precautions are taken. He gives a list of diseases in which he thinks it should not be used, including eczema, psoriasis, acne, alopecia areata, alopecia prematura, pruritus hypertrichosis, folliculitis, verruca, ordinary ringworm, favus, etc., for all of which we possess other efficacious remedies. In lupus erthematosus it is conceded to be useless. He would also exclude epithelioma and rodent ulcer, except in cases unsuited for caustics, curetting or the knife. The x-ray may be used in lupus vulgaris, though it is not the only method of cure in many cases, and scrofuloderma and very extensive ringworm of the head and beard, on account of the tediousness of other treatment in such cases. It is the method of choice in epithelioma and rodent ulcer, so situated that other treatment cannot be employed or so extensive that other methods are hopeless., and in relapses after other methods; in tuberculosis cutis, erythema induratum and some other tuberculides; in sarcoma, mycosis fungoides, rhinoscleroma, keloid, and acne keloid, in which diseases Gottheil knows of no other remedy that has given as good results.

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Treatment of Acute Laryngitis.—Mendel advises repose in bed in a room guarded from noise, with the inhalation three times a day, morning, noon and night, for three to five minutes at a time, of the following solution contained in a suitable atomizer:

℞ Balsam of Peru,.....gr. viiss;
Tincture of benzoin,
Tincture of eucalyptus,.....aa ʒi;
Tincture of soap bark,.....ɱ lxxv;
Cherry laurel water,.....ʒiiss;
Distilled water,.....ʒxiiss.

M.

The patient should be cautioned not to use the solution too freely at first, as it may prove irritating. If the parts are very sensitive and the solution causes irritation its use should be stopped.—N. Y. Medical Journal.

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The internest or general practitioner is the coming man in the medical profession.

Preventive medicine is now the shiboleth of the medical profession.

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The advance of medicine marks the progress of civilization.

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Tuberculin Tests.—Mary C. Lincoln, Chicago (Journal A. M. A., Nov. 21), describes and compares the value of the von Pirquet skin test and the Calmette conjunctival tuberculin test in the diagnosis of tuberculosis. Besides describing her own methods and results, she gives her views of the work of others in this line. Her results are tabulated and she specially calls attention to certain facts, viz: (1) The tests do not agree in every case: 80 per cent of the cases that gave positive results to both the cutaneous and the ocular tests were verified by the opsonic index. The von Pirquet and conjunctival tests agreed in 92 per cent, of the non-tuberculous, in 69 per cent of the cases of bone and joint tuberculosis, and in 64 per cent. of the cases of pulmonary tuberculosis. (2) In spite of the disparity of the results of the tests on the same cases, the percentage of positive results is nearly the same in all. (3) As might be expected theoretically, the more advanced the disease and the lower the reacting power, the smaller the per centage of positive results. (4) A study of the tuberculo-opsonic indices shows that there is a larger per centage in cases of advanced disease and a larger percentage of low indices in cases of less advanced disease. (5) Considerable variation was found from the normal tuberculo-opsonic index in the non-tuberculous cases on account of the generally lowered resistance of some of these cases, though clinically non-tuberculous. It had been previously found that the normal tuberculo-opsonic index ranges from 0.8 to 1.2, as determined by examination of over 100 healthy individuals. There are no published results of harm coming from the use of the von Pirquet test but this is not true of the conjunctival test, which should be used with caution. It is certainly contraindicated in existing inflammatory diseases of the eye.

NEWS NOTES

Dr. John Outland, formerly of Topeka, has established his residence in Kansas City, Kansas.

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Dr. O. S. Hubbard has been appointed assistant superintendent for the Parsons State Hospital for Epileptics, vice Dr. Skoog, resigned. Dr. H. P. Mahan has been appointed first assistant physician.

Dr. Chas. S. Huffman, of Columbus, Kansas, was re-elected State Senator on the republican ticket at the election held in November.

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Dr. M. L. Perry, of Parsons, Kansas, was elected Vice-President of the Medical Association of the Southwest at the recent meeting held in Kansas City, Mo.

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The Wilson County Medical Society met at Neodesha, Tuesday night, Oct. 13th. Sixteen members were present. Papers by Drs. McGuire, Rogers and Moorehead were read and discussed. Meeting adjourned to meet at Benedict, in December. Refreshments were served by the physicians of Neodesha.

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The Labette County Medical Society held its regular monthly meeting Wednesday, the 25th, at the Matthewson hotel. Several very interesting clinical cases were reported. Dr. Geo. Liggett, of Oswego, read a paper on Post-graduate Courses of Study for Medical Societies.'' This paper, with the outlines furnished by the A. M. A., elicited considerable discussion and a committee was appointed to consider the advisability of adopting this course. Dr. Petty, of Altamont, presented a paper on typhoid, which was well presented and brought out considerable discussion.

O. S. HUBBARD, Secy.

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The Third Biennial Report of the Parsons State Hospital for Epileptics has just been issued by Dr. M. L. Perry, the Superintendent. The report is complete in every particular and shows the improvements made in the past two years and points out the needed ones. In his medical report his records show that during the past two years 50 per cent. of the patients received in which an error in the diagnosis was made and of the 183 patients admitted 5.4 per cent. were found to be not epileptic. In the causes given for epilepsy heredity is given the first rank. He deplores the fact that the laws to prevent the marriage of epileptics and imbeciles is not enforced, and should be amended by requiring a more thorough inquiry into the physical condition of parties applying for marriage license, with a penalty for failure to make such investigation.

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The Johnson County Medical Society met with the Secretary, at Gardner, Monday evening, October 12, 1908. We had a liberal attendance and all present seemed to enjoy the program. Dr. O. C. Thomas, of Springhill, read a paper and related a case of

hysteria. Dr. H. E. Williamson, of Olathe, read a paper on gonorrhea. It was excellent and to the point. Both papers were fully discussed. The Society admitted to membership Dr. R. E. Eagan, of Springhill, and Dr. M. F. Sloan, of Stillwell. We adjourned to meet at Springhill, on the 2nd Monday evening in November. The Society met with Dr. O. C. Thomas, Vice-President, Monday evening, November 9th, 1908, at Springhill, Kansas, with an excellent attendance. The papers of the evening: "Acute Parenchymatous Nephritis," by Dr. R. E. Eagan, Springhill. An excellent production, well discussed. "The Prevention of Disease" by Dr. F. F. Greene, Olathe, Kansas. Dr. O. T. Leftwich, of Gardner, Kansas, was admitted to membership. Our Society was never in a more healthy condition. The interest seemed to be lagging, but the plan of meeting in the various towns of the county has revived us and added strength to our numbers. We recommend the plan. W. C. HARKEY, Secretary,

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The Wyandotte County Medical Society met in joint session with the Jackson County society Nov. 24th, in Kansas City, Mo. Fully one hundred doctors were present and a very instructive and interesting meeting was the result. It was strictly a clinical meeting.

Drs. Fryer and Lichtenberg, of Kansas City, Missouri, exhibited a two year old child the subject of "amaurotic family idiocy of Sachs." Its chief interest was the scarcity of the disease, less than one hundred cases being in print. Drs. Neff and Kimberlin, who had studied the case previously, insisted that a question mark be placed after the diagnosis as three of the chief signs were missing: The cherry red spot of the retina, the absence of other cases in the family, and the absence of murasmus. Dr. Hanawalt admitted the diagnosis might be correct, but that the case should be placed in the larger class of infantile palsies, the eye symptoms being merely an addition to those more commonly found. In closing, Dr. Fryer said the murasmus was developing rapidly and there were no other cases in the family as the parents were young and this was the only child.

Dr. Weaver showed a case of congenital coloboma of the iris in a child and illustrated its development by drawings of embryology.

Drs. Barney and Gray demonstrated an immense pyonephros specimen which they had removed recently. Its chief interest was the size and the fact that there were two ureters. Dr. Mark had made two ureteral catheterizations but had never found a super-

fluous opening in the bladder. The diseased kidney passed more fluid than the sound one, but he insisted it was pathological fluid and not normal excretion. Dr. Cordier's opinion was that these cases should be drained and the kidney left to do what work it would, saying that such a vital organ should not be recklessly removed. Dr. Gray met this argument by saying that the usual result of nephrotomy was a long standing, possibly permanent, sinus, and that his experiences would prompt him to do nephrectomy in nearly all cases and especially the case under discussion. The kidney was opened later and showed multiple abscesses, no stones, and probably pyogenic (non-tubercular) in character. The specimen when intact was as large as a three pint vessel.

Dr. Froehling exhibited two cases of great interest medically: One a women past forty with a diagnosis of aneurysm of the ascending aorta, which had been treated by Dr. Hamilton, of Cincinnati, with nineteen feet of wire alloy and a so-called cure effected. Some doubt was expressed by many present as to the exactness of the diagnosis as the tumor was too low down and too far to the right for aneurysm of the ascending part of the aorta. The other case was that of an elderly woman recently dropsical, now presenting a greatly hypertrophid heart, enlarged liver, arterio sclerosis and very rapid pulse. The doctor's diagnosis was aortic insufficiency, but with no murmurs. He explained it as shrinkage of the semilunar valves and dilatation of the aorta by the sclerosis present. He was criticized for exhibiting the case and findings outlined with no chance for others to examine. He readily offered the case for examination, which was done by several present. No one ventured to dispute his findings.

These union meetings of the two societies are to be frequent hereafter and will prove interesting to the doctors on both sides of the Kaw.—H. W.

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Proceedings of the Third Annual Meeting of the Medical Association of the Southwest at Kansas City, Mo., Oct. 19 to 21, 1908.

COATES HOUSE, OCTOBER 19TH.

A meeting of the Executive Committee with the following members present: Dr. B. J. Vance, L. H. Buxton, J. Johnson, G. H. Moody, W. H. Cary, Dr. John Punton, Chairman of the Committee of Arrangements; President Thomas E. Holland, and F. H. Clark.

The Secretary presented the application of Dr. J. Reed Lytle, of Kansas, who was not a member of the State Association because his County Association was not affiliated with the State Association, but who asked membership in the Medical Association of the Southwest. Application was rejected and the Secretary instructed to write him that according to the con-

stitution, none but members of the component State Associations in good standing could become members of this Association.

The Secretary reported that he had secured the services of Mr. William Whitford, of Chicago, who is the official reporter for the A. M. A., to report the proceedings of this meeting at a rate of ten dollars per day and twenty cents per folio for two copies of the transcript of the proceedings.

On motion duly seconded and carried the action of the Secretary was endorsed and he was authorized to pay for such service.

On motion of Dr. Punton, duly seconded and carried, the rule was adopted that during this meeting papers should be read alternately from each section.

The Chairman of the Committee then outlined the arrangements made by the Committee for the meeting, including the social features, which included a dinner for the visiting ladies and their husbands; an automobile ride for the physicians as well as for the ladies ,and a smoker for the men.

The Secretary-Treasurer then presented his report for the year giving a brief synopsis of the effort made to reach and interest all the members of the profession in the five component states. The present membership number 580 which was a very satisfactory gain during the past year.

The financial report shows:

Total receipts during the year,	$653.29
Total disbursements for same time,	$622.35
Balance on hand,	$ 30.94

Total outstanding bills unpaid $91.25.

An auditing committee consisting of Drs. E. H. Cary, John Punton and the Secretary were appointed to audit the books and accounts and after reporting that they found the accounts and books correct the report was accepted and ordered spread on the minutes.

A letter from Dr. Herbert L. Burrell, President of the A. M. A., regretting his inability to be present and wishing the Association a very prosperous year and a good meeting, was read and ordered read to the Association at one of the general meetings.

The President addressed the committee at length regarding the necessity for hearty cooperation on the part of the state Journals if we are to make this Association a success and was authorized to appoint a publication committee consisting of one from each state who is a member of the Executive Committee to devise ways and means to accomplish this result.

The meeting then adjourned to meet at 12 M. Tuesday ,October 20th.

CASINO HALL, October 19th, 2:00 P. M.

General meeting of the Medical Association of the Southwest called to order by the Chairman of the Committee of Arrangements, Dr. John Punton, of Kansas City, Missouri, who announced that Mayor Thos. T. Crittenden, who was to deliver the address of welcome, was unavoidably detained, and introduced Dr. Jabez Jackson, who, in a few well chosen words, gave a cordial welcome to the visiting physicians and their wives in behalf of the p ofession, of Missouri and of Kansas City. Dr. Punton then announced thrat immediately after the adjournment of this session the visiting physicians were invited to become the guests of the physicians of Kansas City and enjoy an automobile ride over the beautiful parks and boulevards. He then introduced the President, Dr. Thomas E. Holland, of Hot Springs, who called upon the following to respond to the words of welcome for their respective states: For Arkansas, Dr. C. T. Drennan, of Hot Springs; for Oklahoma, Dr. A. K. West, of Oklahoma City; for Missouri, Dr. C. W. Fassett, of St. Joseph; for Kansas, Dr. George M. Gray, of Kansas City, Kansas; and for Texas, Dr. Joe Becton, of Greenville.

Meeting then adjourned until 8:00 P. M.

COATES HOUSE, October 19th, 9:00 P. M.

Meeting called to order by Vice-President, S. S. Glasscock, who introduced the President, who then delivered his annual address, which dealt particularly with the birth, origin and need of this Association. Meeting then adjourned to take up the scientific program at 9:00 o'clock A. M., Tuesday morning.

The following were appointed as members of the Nominating Committee:

From Kansas—Drs. George M. Gray, C. C. Goddard, Noah Hays, Hugh B. Caffey, and S. S. Glasscock.

From Missouri—Drs. Mott, Fassett, Lockwood, Dixon, and Stauffer.

From Oklahoma—Drs. M. A. Kelso, A. K. West, H. C. Reed, R. V. Smith, and S. M. Jenkins.

From Texas—Drs. F. D. Boyd, Joe Becton, E. H. Cary, D. Strickland, and Bacon Saunders.

CASINO HALL, October 20th, 9:00 A. M.

Meeting called to order by Vice-President S. S. Glasscock, who introduced Dr. Bacon Saunders, who read the Chairman's address of the Section on Surgery, which was followed by the Chairman of the Section on General Medicine, Dr. F. B. Young, and who was followed by Dr. L. H. Buxton, Chairman of the Section on Eye, Ear, Nose and Throat. Dr. S. S. Glasscock then introduced the Hon. T. T. Crittenden, Mayor of Kansas City, who briefly welcomed the visitors to Kansas City, and assured them that owing to the authority granted him by the charter he was in a position to assure the visitors that the city was theirs and that if any of them got into trouble he would only need to produce his credentials showing him to be a member of this Association to secure executive clemency.

Dr. Punton then announced that at 2:00 P. M. the committee to entertain the visiting ladies would take the physicians for an atuomobile ride around the boulevards, stopping for tea at the country club. Also that the visiting physicians would be entertained with a smoker in the Coates House Tuesday evening at 8:00 P. M.

The Secretary reported that since the meeting of the Association at Hot Springs about 150 new members had applied for admission to the society, all of whom represented themselves to be in good standing as members of their respective state Associations, and asked if he should read the names of these applicants. Upon motion the reading of the names was dispensed with and the Secretary instructed to enroll them as members.

Meeting to take up the work of the scientific program.

COATES HOUSE, PARLOR A—October 20th, 12:00 M.

Meeting of the executive committee called to order by the Chairman, T. E. Holland, with the following members present: C. H. Moody, John Punton, L. H. Buxton, B. J. Vance, Bransford Lewis, C. T. Drennon, LeRoy Long and F. H. Clark.

A free discussion regarding the work of the publication committee was indulged in and the President announced as the committee for the coming year the following:

For Arkansas—Dr. C. T. Drennon.
For Missouri—Dr. Bransford Lewis,.
For Oklahoma—Dr. L. H. Buxton.
For Kansas—Dr. Geo. M. Gray.
For Texas—Dr. G. H. Moody.

The publication committee were intructed to meet at 5:15 Tuesday afternoon.

Committee then adjourned to meet Tuesday evening at 8:00 o'clock.

COATES HOUSE—October 20th, 8:00 P. M.

Meeting of the executive committee called to order and the Secretary who had been authorized to prepare and present the report of the executive committee then presented the report, which embodied the portions of the report already presented by the Secretary showing the present membership and the financial items, the report showed the effort made to interest all the county officers in the five states and the effort made to secure their attendance at this meeting and recommended that the effort be renewed next years; it also contained the report of the special committee appointed to attend the annual meeting of the A. M. A. at Chicago and ask for recognition as a Branch Association and reported that that had been formally promised by Dr. J. N. McCormick at that time. It also mentioned the need for more thoroughly presenting the aims and needs of this association to the profession at large through the different state journals and recommended that this matter be urged and an active campaign be carried forward in

this department. The question for consideration then was whether the association should next year have general sessions as had been arranged for this year and the recommendation was then made that there be only two general sessions at the next annual meeting with the remaining sessions divided up into sections for scientific work.

After accepting the above report and authorizing the Secretary to present the same at the general session Wednesday morning the Committee adjourned to meet Wednesday after the election of the new officers, at 12 M.

CASINO HALL—October 21st, 9:00 A. M.

Meeting of the Association called to order by President Holland. Dr Geo. M. Gray of Kansas City, Kansas, then presented the following resolution which, upon motion, duly seconded and carried, was unanimously adopted:

"Resolved that the Medical Association of the Southwest approves the efforts of the graduate trained nurse to raise the standard of education and to obtain proper recognition through registration."

(Signed), GEO. M. GRAY.

The report of the executive committee's report as outlined elsewhere was presented, which, upon motion duly seconded and carried, was adopted and ordered spread on the minutes.

The following resolutions were then presented by Dr. E. H. Martin of Hot springs Arkansas.:

WHEREAS, the tendency of physicians and charitable organizations over the country is even now to send advanced, indigent consumptives from homes to climate resorts, notably parts of Texas, Colorado, and the Southwest; And,

WHEREAS, the consensus of opinion among the best authorities is that climate alone cannot cure tuberculosis; And,

WHEREAS, boarding houses and hotels in many resorts no longer open their doors to this class of people, thereby depriving them of any chance of securing proper accomodations; and,

WHEREAS, the sanitariums and eleemosynary institutions of the South west are already overburdened with such cases and the people are called upon to do double duty in that they must take care of others beside their own consumptives;

Therefore, be it resolved, that all states and territories throughout the country, and all physicians and charitable organizations be urged to discourage the aimless drifting of the average consumptive and that all advanced consumptives be kept within the confines of their own city, county, or state, and that the legislatures of the several states be urged to pass such laws as will insure the building and maintenance of sanitariums for curable cases and hospitals for advanced cases and incurable cases.

(Signed), E. H. MARTIN.

On motion seconded and duly carried the above resolutions were unanimously adopted. The Secretary was also authorized to notify the secretary of each state association of this action.

The report of the nominating committee was then presented, placing in nomination for the office of president for the coming year, Drs. Jabez N. Jackson of Kansas City, Missouri, and S. S. Glascock of Kansas City, Kansas. Upon motion of Dr. Glasscock duly seconded and carried the rules were suspended and the Secretary was instructed to cast the unaminous vote of the association for Dr. Jackson for president for the ensuing year. The Secretary then announced that he had cast 243 votes for Dr. Jackson for president and the President declared Dr. Jackson duly elected.

The committee then nominated for vice presidents for the ensuing years, Drs. M. L. Perry, Parsons, Kansas; M. A. Kelso, Enid, Oklahoma; Joe Becton, Greenville Texas, and St. Cloud Cooper of Fort Smith, Arkansas. Upon motion the rules were suspended and, as before, the Secretary instructed to cast the unanimous ballot for each of the above. The Secretary then announced the ballot and the president declared each elected.

The nominating committee then presented the name of Dr. F. H. Clark of El Reno, Oklahoma, for Secretary-Treasurer for the coming year and upon motion the Secretary of the nominating committee was instructed to cast the unanimous vote of the association for Dr. Clark for Secretary-Treasurer, and the president declared him elected.

Dr. Bacon Saunders then moved that a rising vote of thanks be tendered the Secretary for his services in behalf of the association during the past year, which was unanimously carried. After, the secretary in a few words thanked the Association for the honor they had conferred and pledged his best efforts in the year to come.

The president then appointed as a committee of two to wait upon the president elect and inform him of his election and escort him to the platform, Drs. Bacon Saunders and C. W. Fassett. While Dr. Fassett was searching for the president elect, Dr. Bacon Saunders presented the following resolutions, which were unanimously adopted by a rising vote:

In view of the unbounded hospitality and the ample facilities afforded this association at this meeting for the comfort, pleasure and delectation of its members,

BE IT RESOLVED, that the thanks and sincere appreciation of the Medical Association of the Southwest, be expressed by a rising vote to the profession of Kansas City, to its committee of arrangements, and to all those who have in any way contributed to the royal greeting and lavish hospitality extended to us during this meeting;

And especially do words fail us when we attempt to voice the gratitude of our hearts for the very great courtesy shown in providing such unfailing means for the pleasure and happiness of the visiting ladies. They must be a gentle and hospitable people indeed who care so well for the strangers within their gates.

Here is to the City by the Kaw—may her longevity and prosperity be as boundless as her hospitality.

(Signed) Bacon Saunders.

The president elect, Dr. Jabez N. Jackson, was then installed into office and addressed the association setting forth briefly the aims and ambitions for the coming year and asking for the same loyal support that had been accorded his predecessor.

The following members of the executive committee were then elected to serve for three years:

Dr. B. J. Vance—Checotah, Oklahoma.
Dr. J. D. Riddell—Enterprise, Kansas.
Dr. E. H. Martin,—Hot Springs, Arkansas.
Dr. C. W. Fassett—St. Joseph, Missouri,.
Dr. D. Strickland—Cleburne, Texas.

The nominating committee then presented San Antonio, Texas, as the next Place of meeting which was upon motion duly selected and the meeting adjourned to finish the scientific session.

F. H. CLARK, M. D.,
Secretary-Treasurer.

Section officers for the ensuing year:

Section on Surgery:
Chairman, Dr. J. A. Foltz, Fort Smith, Arkansas.
Vice Chairman, Dr. R. H. Barnes, St. Louis, Missouri.

Section on General Medicine:
Chairman Dr. A. K. West, Oklahoma City, Oklahoma.
Vice Chairman, Dr. G. H. Moody, San Antonio, Texas.
Secretary, Dr. Louis M. Warfield, St. Louis, Missouri.

Section on Eye, Ear, Nose and Throat.
Chairman, Dr. F. D. Boyd, Fort Worth, Texas.
Vice Chairman, Dr. J. E. Gsell, Wichita, Kansas.
Secretary, Dr. A. W. McAlester, Kansas City, Missouri.

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BOOK REVIEW.

SURGERY. By John Allen Wyeth, M. D., LL. D. (University of Alabama), President of the New York Academy of Medicine. Cloth. Pp. 816 . with 864 illustrations, of which 57 are colored. Price, $6.00. New York: Marion-Sims Wyeth & Co., 1908.

After twenty-one years the profession is so familiar with

Wyeth's text book on Surgery (published by D. Appleton and Company) that it seems hardly necessary to call attention to his new edition, Wyeth's Surgery, by the Marion-Sims-Wyeth Company.

A comparison of the 1887 work with this last book, demonstrates how much of the surgery of the youth of some of us is now obsolete. It is not like the usual text book on Surgery, it is more useful for the active practitioner than the student. While not exhaustive like some of the composite works of several volumes, it is quite comprehensive, covering the eye, ear, nose and throat diseases, urine and blood. It covers the entire range of general and special surgery. It is a practical guide to the recognition and treatment of the most common and most important major and minor affections.

It should continue to hold the high place that its predecessors, "Wyeth's Text Book on Surgery," has held for the last twenty-one years. —L. H. M.

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CONSUMPTION:—How to prevent it and how to live with it. Its nature causes, prevention, and the mode of life, climate, exercise, food, and clothing necessary for its cure. By N. S. Davis, A. M., M. D., Professor of Principles and Practice of Medicine, Northwestern University Medical School, Chicago; Physician to Mercy and Wesley Hospitals; Member of the American Medical Association, American Climatological Association, Illinois State Medical Society, Chicago Medical Society, Chicago Pathological Society, Chicago Neurological Society, Chicago Academy of Sciences; Fellow of the American Academy of Medicine; Author of a Hand-book on "diseases of the Lungs, Heart and Kidneys," and a treatise on "Diet in Disease and Health." Second Edition, thoroughly revised. 12mo. 172 Pages. Bound in Extra Cloth. Price, $1.00, net. F. A. DAVIS Company, Publishers, 1914-16 Cherry Street, Philadelphia, Pa.

The need of educating the public in medicine is now conceded and its importance attested by the general inauguration of lecture courses and the appearance of many magazine articles. Furthermore, in no particular is there greater need of this education than along the lines of tuberculous disorders.

Dr. Davis has made for himself an honorable name in medical literature and is therefore one from whom one expects really important contributions.

The text before us is written so completely from the standpoint of the physician that possibly it will not appear to general readers with great force. But to those who are seeking help, it will be very welcome, because the statements are clear, precise and succinct It will be especially interesting for doctors themselves to peruse, because it will furnish an excellent and up-to-date summary for our knowledge of the disease.—G. H .H.